

Po-4/Pq-4/Pf-4/Pg-4/Pae-2/Pu-4/Pk-4/Pl-4 IJP(s) JD/WW/EC

ACCESSION NR: AP5006573

S/0286/64/000/019/0024/0024

AUTHOR: Saltykov, B. N.; Yakunin, Yu. M.; Vinogradov, G. M.; Kondratenko, A. V.;
Belikov, A. I.; Belichen, A. I.; Kvasova, S. I.

TITLE: Method of controlling slave systems. Class 21, No. 165491

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1964, 24

TOPIC TAGS: automatic control, electric equipment

Translation: Method of controlling slave systems.

Distinguishing feature: In order to control the slave systems without turning the transducer, the signal windings of the transducer are magnetized with DC.

ASSOCIATION: Gosudarstvennyy komitet po aviatsionnoy tekhnike (State Committee for Aircraft Technology)

SUBMITTED: 04Jun63

ENCL: 00

SUB CODE: FE, FE

NO REF SOV: 000

OTHER: 000

JPRS

Card 1/1 *ks*

SALTYKOV, F. I.

Saltykov, F. I. - "The use of local mineral resources for animal feeding", Sbornik nauch. rabot (Vsesoyuz. nauch.-issled. in-t ovtsevodstva i kozovodstva), Issue 16, 1948, p. 163-84, - Bibliog: 47 items.

So: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 7, 1949).

1. SYSOGOROV, V. I., SALTYKOV, F. I., VERBICH, O. A.
2. USSR (600)
7. "The Concentrated Silo", Sov. Zootekhnika, No 8, 1951, pp 64-69.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

SALTYKOV, F.I.

Silage formulas for hog feeding. F. I. Saltykov and O. A. Verbich. *Sotsialist. Trarinnistvo*, 1953, No. 10, 17-19 (in Ukrainian); *Referat. Zhur., Biol.*, 1955, No. 7811. — The following green fodder formulas were silaged: (1) garden beets 75, barley 25; (2) garden beets 75, alfalfa meal 25; (3) beets 75, barley 12.5, alfalfa meal 12.5; (4) beets 50, alfalfa meal 33, water 17; (5) beets 45, squash 35, alfalfa 20; (6) squash 75, alfalfa meal 25%. Analytical results are presented of fractional digestibility of each formula and gain in wt., fat, etc., by the hogs. B. S. Levins.

MD

①

SALTYKOV, F.I.

Mineralization of the skeleton in swine in connection with age
and protein level of feed rations. Trudy Inst.morf.zhiv. no.31:
166-169 '60. (MIRA 13:6)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut gibrizatsii i
akklimatizatsii zhivotnykh "Askaniya-Nova".
(Swine--Feeding and feeds)

SALTYKOV, G., podpolkovnik

Approach bridges and fords more quickly. Voenn. vest. 41 no. 5;
35-38 My '61. (MIRA 1478)
(Stream crossing, Military)

SALTYKOV, I.

Beryllium. IUn.tekh. 4 no.1:30-32 Ja '60.
(MIRA 13:5)

(Beryllium)

SALTYKOV, I.

That is the "SSH". IUn. tekhn. 4 no.10:9-11 0 '59.

(MIRA 13:1)

(Motor vehicles)

KRASOV, Yu.; SALTYKOV, I.

School of wonders. IUn.tekh. 5 no.7:26-29 JI '61. (MIRA 15:1)
(Radio—Apparatus and supplies)
(Models and modelmaking)

SOBOL', S.I.; NELEN', I.M.; SPIRIDONOVA, V.I.; BERLIN, Z.L;
GORYACHKIN, V.I.; TARAKANOV, B.M.; SHKURSKIY, V.D.; Prinsipali
uchastiye: FREYMAN, A.K., inzh.; BRUK, B.M., inzh.;
CHEBOTKEVICH, G.V., inzh.; OSPIN, V.G., inzh.; ALEKSANDROVA, N.N.,
laborant; SALTYKOV, I.B., laborant; TELKOVA, Ye.I., laborantka;
TEPLYAKOV, Yu.M., laborant; GAVRILENKO, A.P., slesar';
KURGUZOV, A.S., elektrik; GAVRILOV, I.T., elektrik

Pilot-plant testing of the State Institute of Nonferrous
Metals flow sheet for the autoclave retreatment of copper-
molybdenum intermediate products. Sbor. nauch. trud. Gin-
tsvetmeta no.19:319-339 '62. (MIRA 16:7)

(Nonferrous metals--Metallurgy)
(Leaching)

SALTYKOV, L., podpolkovnik

Only forward! Voen. vest. 41 no.2:15-17 F '62. (MIRA 15:3)
(Tank warfare) (World War, 1939-1945)

S/048/60/024/007/004/011
B019/B060

AUTHORS: Nemets, O. F., Saltykov, L. S., Sokolov, M. V.,
Tsekhmistrenko, Yu. V.

TITLE: ¹⁹
Determination of the Spins and Parities of Levels From
the Inelastic Scattering and the "Pickup" Reactions by
Be⁹ ¹⁹

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 7, pp. 858-861

TEXT: This is the reproduction of a lecture delivered at the 10th All-Union Conference on Nuclear Spectroscopy held in Moscow from January 19 to 27, 1960. It is stated in the introduction that the determination of spin and parity of the first excited level is of decisive importance for the definition of the Be⁹ nuclear model. Despite a great number of papers on the determination of spin and parity of the 2.43-Mev level, these parameters are not yet exactly determined. The authors, therefore, studied the angular distribution of inelastically scattered 6.8-Mev protons and

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Determination of the Spins and Parities of
Levels From the Inelastic Scattering and the
"Pickup" Reactions by Be^9

S/048/60/024/007/004/011
B019/B060

13.6-Mev deuterons. In doing so, they examined the reactions (p,d) and (d,t) in order to clarify the reaction mechanism at the above-mentioned energies. The measurements were made on the cyclotron of the institute mentioned under Association; the detector of the inelastically scattered deuterons and tritons from the (d,t) reaction has already been described in a previous paper (Ref. 4). The inelastically scattered protons and deuterons were recorded with a scintillation spectrometer. Figs. 1 to 4 graphically illustrate the angular distribution of the inelastic scattered protons, the angular distribution of the inelastic scattered deuterons, the angular distribution of deuterons from the $\text{Be}^9(\text{p,d})\text{Be}^8$ reaction and the angular distribution of tritons from the reaction $\text{Be}^9(\text{d,t})\text{Be}^8$. Electric and nuclear interactions are assumed in the theoretical consideration in order to clarify the angular distribution yielded by experiments. Under these premises, formula (1) is written down for the cross section of the final state of Be^9 when $l = 2$. It follows from further discussion of results that spin and parity of the

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S/056/60/038/006/014/049/XX
B006/B070

21.1700
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AUTHORS:

Nemets, O. F., Saltykov, L. S., Sokolov, M. V.

TITLE:

The (p,d) Reaction and the Inelastic Scattering of
Protons From Be⁹

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki,
1960, Vol. 38, No. 6, pp. 1663 - 1664

TEXT: The angular distribution of protons inelastically scattered from Be⁹ nuclei, and of deuterons from the reaction Be⁹(p,d)Be⁸ have been measured, the reaction being induced by 6.8-Mev protons. The object of the study was to determine the spin and parity of Be⁹ levels whose knowledge is of importance for choosing the nuclear model for Be⁹. The experiments were carried out on the cyclotron of the Institut fiziki AN USSR (Institute of Physics of the AS UkrSSR) in the same way as in Ref. 8; only a H₂-ion beam was used, and a scintillation spectrometer was employed instead of an ionization chamber. The thickness of the Be target was 1.4 mg/cm². The measured

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85672

The (p,d) Reaction and the Inelastic
Scattering of Protons From Be⁹

S/056/60/038/006/014/049/XX
B006/B070

angular distribution of the inelastically scattered protons in c.m.s. is shown in Fig. 1 (Curve 1). Curve 2 shows the results of calculation for the case of a direct interaction with $r_0 = 4 \cdot 10^{-13}$ cm; Curve 3

shows the results of calculation for the case of a direct excitation of the rotational levels in the alpha-particle model ($r_0 = 5.6 \cdot 10^{-13}$ cm).

In the first case the 2.43-Mev level must have a positive parity, and in the second case, a negative one. The theoretical and experimental curves, however, do not agree so well that the parity of the state can be determined. Also, there is no theory of the increase of cross section for small angles, which connects the electrical interaction of the proton with the nucleus. Fig. 2 (Curve 1) shows the angular distribution of deuterons from the reaction Be⁹(pd)Be⁸; the theoretical curves are again given for comparison. Curve 2 is calculated for the case when the proton interacts only with the unpaired neutron; Curve 3 is calculated in Born approximation. The orbital momentum of the neutron was assumed to be 1 in accordance

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The (p,d) Reaction and the Inelastic
Scattering of Protons From Be⁹

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with the spins of the ground states of Be⁹ and Be⁸ ($3/2^-$ and 0^+).
The results of deuteron distribution agree well with other measure-
ments of proton energies. Professor M. V. Pasechnik is thanked for
his interest, and Yu. A. Bin'kovskiy for preparing the target.
There are 2 figures and 13 references: 2 Soviet, 9 US, 1 Italian,
and 1 British.

ASSOCIATION: Institut fiziki Akademii nauk Ukrainskoy SSR
(Institute of Physics of the Academy of Sciences
Ukrainskaya SSR)

SUBMITTED: December 13, 1959

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S/056/60/038/006/014/049/XX
B006/B070

Fig. 1

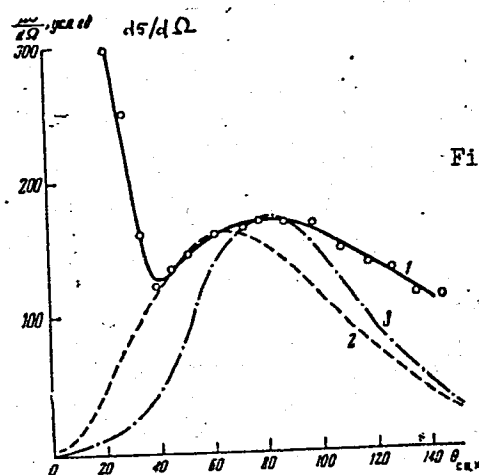


Fig. 1

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Рис. 1

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B006/B070

Fig. 2

Fig. 2

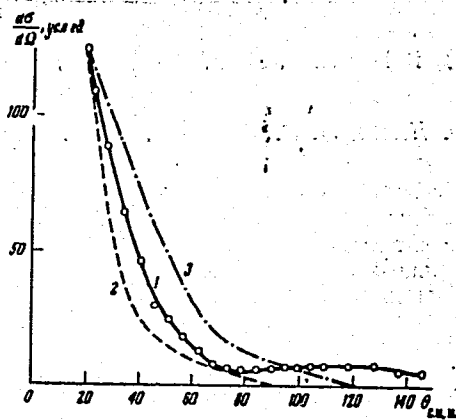


Рис. 2

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20688

S/120/61/000/001/024/062
E032/E114

9.4/30 (1138, 1141, 2801, 3201)

AUTHORS: Kosinov, G.A., Nemets, O.F., Saltykov, L.S., and Sokolov, M.V.

TITLE: A Device for the Selection and Adjustment of Photomultipliers

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, ⁶No. 1, p 78

TEXT: The principle of the device is illustrated in Fig.1. Light from the lamp 1 passes through the slit 2, the collecting lens 3, and finally reaches the mirror 4 which is rotated by an electric motor. The reflected ray falls on the photomultiplier 6 through the slit 5. The focal length and the position of the lens are chosen so that the image of the light source in the plane of the photocathode has the required dimensions and brightness. The mirror (5 x 8 mm²) is rotated by a MM-1 (MM-1) motor, working off the audio-oscillator 3Г-10 (ZG-10). The speed of the motor can be varied between 4800 and 25600 rpm when the oscillator frequency is varied from 1200 to 2000 cps and the supply voltage from 1 to 6 V. The angular velocity of the motor is independent of the supply voltage
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S/120/61/000/001/024/062
E032/E114

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A Device for the Selection and Adjustment of Photomultipliers

(between 4 and 6 V) which ensures that the length of the leading edge and the amplitude of the light pulse remain constant.

Figs. 2 and 3 show photographs of pulses obtained at the maximum angular velocity of the motor. Fig. 2 was obtained with a circular diaphragm, 3 mm in diameter, and Fig. 3 with a 0.1 mm slit (both at 5 in Fig. 1). In these figures one division corresponds to 0.27 μ sec. Thus, the device is capable of producing light flashes with leading edges $\tau \gg 0.05 \mu$ sec, repetition frequency $\nu \leq 420 \text{ sec}^{-1}$, and amplitude equivalent to a scintillation produced in a sodium iodide crystal irradiated with particles of a few MeV. There are 3 figures.

ASSOCIATION: Institut fiziki AN USSR
(Physics Institute, AS Ukr.SSR)

SUBMITTED: December 2, 1959

Card 2/4

Polarization of protons...

S/056/62/043/005/002/058
B164/B102

angles the energy dependence of the polarization is small. The authors compare the experimental $P(\theta)$ curves for Be^9 , Be^{10} , Ca^{40} and Ni^{58} with the corresponding differential cross sections $\sigma(\theta)$. All nuclei show the same qualitative behavior, with the characteristic correlation between the maximum of $P(\theta)$ and the minimum of $\sigma(\theta)$. At angles smaller than 15° , $P(\theta)$ is found to increase, whereas a minimum is observed in the region of the principal maximum of $\sigma(\theta)$. A slight increase and a strong decrease then follow, in which the sign of the polarization might even change. At larger angles, P reaches values which equal approximately those in the principal maximum of $\sigma(\theta)$. The course of $P(\theta)$ calculated for Be^{10} by Tobokman (Phys. Rev. 115, 98, 1959) for a deuteron energy of 8 Mev shows good qualitative agreement with the experimental values obtained. There are 4 figures and 1 table.

SUBMITTED: March 3, 1962

Card 2/2

PASECHNIK, M.V.; SALTYKOV, L.S.; TAMBOVTSEV, D.I.

Polarization of protons in stripping reactions on light
and medium nuclei. Zhur. eksp. i teor. fiz. 43 no.5:1575-1578
N '62. (MIRA 15:12)

(Protons)
(Nuclear reactions)

L 27583-66 EWT(m)/T

ACC NR: AP6018378

SOURCE CODE: UR/0185/65/010/004/0452/0453

AUTHOR: Mal'ko, O. I.; Pasichnyk, M. V.; Saltykov, L. S.

ORG: Institute of Physics, AN UkrSSR, Kiev (Instytut fizyky AN UkrSSR)

TITLE: Asymmetry of angular distribution of products of reaction Si sup 28 (d,d) Si sup 28 with polarized deuterons

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 4, 1965, 452-453

TOPIC TAGS: cyclotron, angular distribution, deuteron, polarization, deuteron scattering, coulomb scattering

ABSTRACT: The classical equation for the above type of reaction is given, together with results of experiments performed on the IF cyclotron of the USSR Academy of Sciences. B/A asymmetry at small angles, where Coulomb scattering predominates, is small and increases as the scattering angle increases, attaining a maximum at 37° (laboratory). It subsequently falls and at 54° passes through zero and changes sign. Type C/A asymmetry is large when the B/A-type asymmetry is large. It always remains positive and reaches a minimum when asymmetry of the B/A type is zero. The authors thank M. M. Puchercov for his interest in the work and for his discussions of the results. Orig. art. has: 5 formulas and 1 table. [JPRS]

SUB CODE: 20 / SUBM DATE: 28Nov64 / OTH REF: 003

Card 1/1

VASIL'CHENKO, P.A., inzh.; SALT'YKOV, M.A., inzh.; TALYANKER, Yu.Ye., inzh.

Protection of the 2D100 diesel engine from the effects of
explosions occurring in the crankcase. Elek. i tepl. tiaga
2 no.12:30-31 D '58. (MIRA 12:1)
(Diesel engines--Testing)

SALTYKOV, M. A., inzh.

Calculating the tightness and stresses in joints of thin-walled bushings of divided bearings. Vest. mashinostr. 42
no.12:7-12 D '62. (MIRA 16:1)

(Bearings(Machinery))

SALTYKOV, M.A., inzh.

Calculating stresses in bed joints and the parameters of tightening
of divided bearings with thin-walled bushings. Vest.mashinostr. 44
no.3:9-16 Mr '64. (MIRA 17:4)

118-58-6-15/21

AUTHOR: Saltykov, M.I., Candidate of Economic Sciences

TITLE: Questions Referring to the Further Development of the USSR
Timber Cutting Industry (Voprosy dal'neyshego razvitiya leso-
zagotovitel'noy promyshlennosti SSSR)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 6,
pp 35-37 (USSR)

ABSTRACT: Referring to the article of Professor S.F. Orlov, this periodical
Nr 4, 1958, on the mechanization and automation of timber cut-
ting, the author points out that the present method of destruc-
tive forest exploitation is not only very expensive, but will
lead to the liquidation of forests amounting to 3 million ha
per year, adversely affecting the water resources, the agri-
culture and the wood processing industrial enterprises of that
district. The author demands long-term forest management plans,
ensuring a permanent maintenance of the existing resources.
The organization of timber industry combines should comply with
the principle of continuous forest utilization. Furthermore,
the author presents a table of various timber cutting operations
with corresponding mechanical means to be used.

Card 1/2

118-58-6-15/21

Questions Referring to the Further Development of the USSR Timber Cutting Industry

There is 1 table and 1 Soviet reference.

1. Forestry--USSR 2. Timber--Cutting--Automation

Card 2/2

SALTYKOV M. I.

AUTHOR: None Given

SOV-118-58-7-7/20

TITLE: A Scientific-Technical Conference on Questions Regarding the Mechanization of the Lumber Industry (Nauchno-tekhnicheskaya konferentsiya po voprosam mekhanizatsii v lesnoy promyshlennosti)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 7, p 19, (USSR)

ABSTRACT: In May 1958, the Moskovskiy lesotekhnicheskii institut (the Moscow Institute of Forest Engineering) called a scientific conference. Attending were approximately 300 persons, among them representatives from the Gor'kovskiy (Gor'kiy), Kalininskiy (Kalinin), Kirovskiy (Kirov), Komi, Permskiy (Perm'), Tyumenskiy (Tyumen') and Moskovskiy (Moscow) sovnarkhozes. Also attending were delegates from big lumber enterprises, lumber mills, furniture factories; the Gosudarstvennyy nauchno-tekhnicheskii komitet Soveta Ministrov SSSR (State Scientific Technical Committee of the USSR Council of Ministers), the USSR Gosplan, the TsNIIME, the TsNIIMOD, the Giprolesprom and from other organizations. The Member-Correspondent of the VASKhNIL, N.P. Anuchin reported on the future development of the Soviet lumber industry (1959 to 1965). The Chief Engineer of the Krestetskiy-lespromkhoz TsNIIME (the Kresttsy Lespromkhoz) reported on a semi-automatic conveyer line introduced at

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SOV-118-58-7-7/27

A Scientific-Technical Conference on Questions Regarding the Mechanization of the Lumber Industry

the Kresttsy lespromkhoz. The Candidate of Technical Sciences, B.A. Tauber delivered a report on the mechanization of lumber loading and stacking operations. The following reports were also heard: Dotsent N.I. Suboch - "The Present State and Development of Lumber Transportation"; Dotsent M.I. Saltykov - "The All-Round Utilization of Raw Material and the Organization of Lumber Industry on the Principle of Continuous Forest Use"; Candidate of Technical Sciences, G.A. Vil'ke - "The Vibration of Gasoline Motor Saws"; scientific worker, V.V. Kharitonov - "Choosing a Method of Bark Stripping"; Dotsent M.I. Kishinskiy - "The Transportation of Lumber by Motor Transport in Winter"; Professor M.I. Zaychik - "The Exploitation of Diesel Engines at Shops"; Professor N.N. Chulitskiy - "Investigations on New Technological Equipment for Production Line and Automated Furniture Production"; Head of the Tekhnologicheskii otdel proyektnogo instituta Nr 2 (Technological Division of the Nr 2 Design Institute), V.A.

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SOV-118-58-7-7/27
A Scientific-Technical Conference on Questions Regarding the Mechanization
of the Lumber Industry

Tselebrovskiy - "Mechanization and Automation of Production Pro-
cesses at the Raw Material Exchange Center of the Omutninsk
House Construction Combine".

1. Lumber industry--USSR

Card 3/3

BALAGUROV, Nikolay Aleksandrovich; SALTYKOV, Mikhail Ivanovich; SUDNITSYN, I.I., dotsent, retsenzent; NEVZOROV, N.V., red.; SHAKHOVA, L.I., red.izd-va; PARAKHINA, N.L., tekhn.red.

[Economics of the Soviet lumbering industry] Ekonomika lesosozagotovitel'noi promyshlennosti SSSR. Moskva, Goslesbumizdat, 1959.
259 p. (MIRA 13:3)

(Lumbering)

SPRINTSYN, M.N.; AMALITSKIY, V.M.[deceased]; DENIS'YEV, V.I.; ZHUKOV, A.M.; LIKHOVIDOV, N.K.; SHCHEDRIN, B.Ye.; KAFTANOVSKIY, G.M.; SUKHANOVSKIY, A.I.; TSVETKOV, V.A.[deceased]; MITEL'MAN, Ye.L.; KALASHNIKOV, P.L.; ANDREYEV, I.I., retsenzent; SALTYKOV, M.I., otv. red.; SLUTSKER, M.Z., red. izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Handbook for the logging enterprise economist] Spravochnik ekonomista Lespromkhoza. Moskva, Goslesbumizdat, 1962. 291 p.
(MIRA 16:1)

(Lumbering--Handbooks, manuals, etc.)

SALTYKOV, M.I.

Some results and tasks of research on wood processing. Der.
prom. 12 no.4:1-3 Ap '63. (MIRA 16:10)

1. Gosudarstvennyy komitet po koordinatsii nauchno-issledovatel'skikh
rabot SSSR.

BALAGUROV, Nikolay Aleksandrovich; SALT'YKOV, M.I., red.

[Cost and the profitability of lumbering production]
Sebestoimost' i rentabel'nost' lesozagotovitel'nogo
proizvodstva. Moskva, Goslesbumizdat, 1963. 289 p.
(MIRA 17:5)

SALTYKOV, N. I.

"Concerning the Calculated Value of Expansive Forces, Acting on the Foundations of Structures
Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 6, 1944. Institute of Permafrost Studies, Academy
of Sciences, USSR. Submitted 23 Sep 1943.

Report U-1556, 14 Nov 1951.

USPENSKIY, Mikhail Sergeyevich; SALTYSKOV, N.I. redaktor; KUZ'MIN, G.M.
tekhnicheskiy redaktor.

[Conditions for affixing geodetic points and bench marks]
Usloviia ustoiichivosti geodezicheskikh tsentrov i reperov.
Moskva, Izd-vo geodezicheskoi lit-ry, 1955. 94 p. (MIRA 8:7)
(Geodesy)

SALTYKOV, N. I.
BONDAREV, Petr Dmitriyevich; SALTYKOV, N. I., otvetstvennyy redaktor;
MURONOV, L. A., redaktor izdatel'stva; GUSEVA, I. N., tekhnicheskii
redaktor

[Deformation of buildings in the Vorkuta region, causes of these
deformation and methods of preventing them] Deformatsii zdaniy v
raione Vorkuty, ikh priчины i metody preotvrashcheniya. Moskva,
Izd-vo Akad.nauk SSSR, 1967. 97 s. (MLRA 10:10)
(Vorkuta region--buildings)

YEGOROV, Konstantin Yefimovich, SALTUKOV, M.I., prof., doktor tekhnicheskikh nauk, otv.red.; MUROMOV, L.A., red.; ZELENKOVA, Ye.V., tekhn.red.

[Designing reinforced concrete foundation and building frames subject to irregular setting] Raschet zhelezobetonnykh ramnykh fundamentov i karkasov pri neravnomernoi osadka opor. Moskva
Izd-vo Akad. nauk SSSR, 1958. 58 p. (MIRA 11:8)
(Reinforced concrete construction) (Foundations)

3(3)

PHASE I BOOK EXPLOITATION

SOV/2074

Meyster, L.A., and N.I. Saltykov

K istorii geokriologicheskikh issledovaniy v SSSR (On the History of Cryopedological Research in the USSR) Syktyvkar, Komi knizhnoye izd-vo, 1958. 82 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut merzlotovedeniya imeni V.A. Obrucheva.

Resp. Ed.: S.P. Kachurin, Candidate of Geographical Sciences;
Resp. Ed. for this book: L.A. Brattsev; Tech. Ed.: I. Oplesnin.

PURPOSE: This book is intended for engineers and other specialists concerned with construction work and the exploitation of mineral and other resources in permafrost regions.

COVERAGE: This is a review of the development of cryogenic studies of permafrost phenomena and conditions in Russia during the Soviet period. Systematic studies began with the appearance of M.I. Sumgin's work, Vechnaya merzlota pochvy v predelakh SSSR, in 1927.

Card 1/3

On the History of Cryopedological Research (Cont.)

SOV/2074

Since then, extensive research on construction conditions, underground water, artificial defrosting, physicommechanical properties of frozen rock, the physical, physicommechanical, and physicochemical (particularly thermophysical) processes in soils and subsoils related to seasonal freezing, highway, railroad, airport and dam construction, mining, and pipe laying in the polar and subpolar areas, etc. has been conducted by numerous institutions and organizations. The following are the more important: Institut merzlotovedeniya; Section of Permafrost Studies; Department of Geology, Moscow State University imeni M.V. Lomonosov (established 1953); Department of Road Research, TsUMT (Central Administration of Local Transportation), Leningrad; GIPROMEZ (State Institute for the Design and Planning of Metallurgical Plants), Leningrad; Institute of Railroad Transportation Engineers, Moscow; Agricultural Academy imeni K.A. Timiryazev, Moscow; Amuro-Yakutskaya Highways Administration; Glavsevmorput'; the North-eastern Division of the Institute of Permafrost Research (formerly the Yakutsk Scientific Research Permafrost Station); Scientific Research Institute at Magadan (geocryological research); Chita Permafrost Station (1941-43); Aldan Permafrost Scientific Research Station of the Institute of Permafrost Research at Chul'man, Yakutskaya ASSR; LIIKS (Leningrad Institute of Municipal

Card 2/3

On the History of Cryopedological Research (Cont.)

SOV/2074

Construction Engineers. Research was aided by permafrost stations at Skovorodino, Petrovsk-Zabaykal'sk, Anadyr', Igarka, Yakutsk, Vorkuta, Noril'sk, and Bratsk. Some of the more important scientists in this field are: M.I. Sumgin, V.I. Vernadskiy, P.I. Koslovskov, N.A. Tsitovich, S.P. Kachurin, N.I. Tolstikhin, V.F. Tumel', L.A. Bratsev, L.A. Yachevskiy, V.B. Shostakovk, M.N. Gold'shteyn, Ananyan, Razumov, Tyutyunov, Bakulin, and Pchelintsev. Their theories and contributions and those of many others are discussed by the author. Outstanding works in this field are: Osnovaniya mekhaniki merzlykh gruntov, by N.A. Tsitovich and M.I. Sumgin; Obshcheye merzlotovedeniye, by M.I. Sumgin et al.; Ornovy geokriologii, published by the Institute for Permafrost Research. A geocryological map of the USSR, scale 1: 5,000,000, which reflects the effect of physico-geographic zonality and azonality of geological and hydrological conditions on the formation and distribution of frozen layers and the distribution of seasonally freezing soil and rocks is now being compiled; a similar map, scale 1:10,000,000 has already been published. There are 258 Soviet references.

TABLE OF CONTENTS: None given

AVAILABLE: Library of Congress

Card 3/3

MM/ad
7-21-59

ZHUKOV, Vladimir Fedorovich; SALTYKOV, N.I., prof., doktor tekhn. nauk,
otvetstvennyy red.; NIKOLAYEVA, I.N., red. izd-va; MAKUNI, Ye.V.,
tekhn. red.

[Thawing out of permanently frozen ground preliminary to erection
of structures on it] Predpostroyechnoe protaivanie mnogoletnemerzlykh
gornyykh porod pri vozvedenii na nikh sooruzhenii. Moskva, Izd-vo
Akad. nauk SSSR, 1958. 146 p. (MIRA 11:9)
(Building—Cold weather conditions) (Frozen ground)

SALTYKOV, N.I.

3(5,7) R.2.

PHASE I BOOK EXPLOITATION

SOV/2822

Mezhduvedomstvennoye soveshchaniye po merzlotovedeniyu. 7th, Moscow, 1956

Materialy po inzhenernomu merzlotovedeniyu (Materials on Engineering Aspects of Permafrost; the 7th Interdepartmental Conference on Studies of Permafrost) Moscow, Izd-vo AN SSSR, 1959. 199 p. Errata slip inserted. 1,300 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye geologo-geograficheskikh nauk. Institut merzlotovedeniya.

Eds.: I. Ya. Baranov, N. A. Tsytoich, and A. M. Chekotillo; Ed. of Publishing House: A. L. Bankvitsaer; Tech. Ed.: Ye. V. Makuni.

PURPOSE: This book is intended primarily for construction engineers and geologists interested in permafrost problems.

COVERAGE: This collection of articles contains reports originally discussed at the 7th Interdepartmental Conference on Permafrost held in Moscow in March, 1956. Materials of this conference were published in three issues: general

Card 1/6

Materials on Engineering Aspects (Cont.)

SOV/2822

permafrost studies, engineering aspects of permafrost [present work], and ground physics and mechanics. Individual articles of this work discuss basic problems of planning, building, and operating various buildings and structures in permafrost regions. Some of the information reported, particularly on hydraulic engineering construction, is new and appears for the first time in the literature on permafrost. Articles are accompanied by references.

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Bogoslovskiy, P. A. Temperature Conditions of a Non-Filtering Earth Dam Built on Perennially Frozen Ground After a Period of Extended Operation (the limiting thermal state)	21

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Materials on Engineering Aspects (Cont.)

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- Chernigov, V. A. Heat Engineering Computation of Cooling of Concrete Foundations Taking Into Account the Heat Losses in a Perennially Frozen Bed 50
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- Mel'nikov, P. I. Methods of Efficient Foundation Building in the Perennially Frozen Ground of the Yakutskaya ASSR 65
- Kuryachiy, A. N., and V. A. Illarionov. Certain Problems of Construction Designing for the Conditions Which Prevail in the Far Northeast 74

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SALTYKOV, Nikolay Iyanovich. Prinimali uchastiye: YEGEREV, K.Ye.;
ZHUKOV, V.F.. PORKHAYEV, G.V., kand.tekhn.nauk, starshiy
nauchnyy sotrudnik, otv.red.; NIKOLAYEVA, I.N., red.izd-va;
POLYAKOVA, T.V., tekhn.red.

[Foundation engineering in permafrost areas] Osnovaniya
i fundamenty v raionakh rasprostraneniya mnogoletnemerzlykh
gruntov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 205 p.
(MIRA 13:1)

1. Institut merzlotovedeniya imeni V.A.Obrucheva (for Por-
khayev).

(Foundations)

(Frozen ground)

ORLOV, Vladimir Osipovich; SALTYKOV, N.I., doktor tekhn. nauk, prof.
otv. red.; BELOKRYLOV, I.D., red. izd-va; BRODSKAYA, A.G.,
red. izd-va; RYLINA, Yu.V., tekhn. red.

[Frost heaving of finely dispersed soils] Kriogennoe puchenie
tonkodispersnykh gruntov. Moskva, Izd-vo Akad. nauk SSSR,
1962. 186 p. (MIRA 15:11)
(Frozen ground) (Foundations)

SALTYKOV, N.I., prof., doktor tekhn. nauk, otv. red.; BANKVITSER,
A.L., red.; LAUT, V.G., tekhn. red.

[Heat and mass exchange in frozen layers of the earth's
crust] Teplo-i massoobmen v merzlykh tolshchakh zemnoi kory.
Moskva, Izd-vo Akad. nauk SSSR, 1963. 213 p. (MIRA 16:5)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut merz-
lotovedeniya.

(Frozen ground)

DEMIN, Aleksandr Iosifovich; SALTYKOV, N.I., doktor tekhn. nauk,
prof., otv. red.; VOLYNSKAYA, V.S., red. izd-va;
SUSHKOVA, L.A., tekhn. red.; TIKHOMIROVA, S.G., tekhn. red.

[Problems in basin snow-water irrigation of meadows using
local runoff in central Yakutia] Voprosy limannogo orosheniia
lugov na mestnom stoke v usloviakh Tsentral'noi Iakutii.
Moskva, Izd-vo AN SSSR, 1963. 110 p. (MIRA 16:7)
(Yakutia--Pastures and meadows--Irrigation)

MEL'NIKOV, P.I., red.; IVANOV, N.S., red.; KARTASHOV, S.N., red.;
KACHURIN, S.P., red.; SALTYKOV, N.I., red.; SHEYNMAN,
V.S., red.izd-va; ZUDINA, V.I., tekhn. red.

[Present-day problems of regional and engineering geocryology (cryopedology)] Sovremennye voprosy regional'noi i inzhenernoi geokriologii (merzlotovedeniia). Moskva, Izd-vo "Nauka," 1964. 208 p. (MIRA 17:3)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut merzlotovedeniya.

SALTYKOW, N.
Saltykow, N. Généralisation des recherches de Jacobi sur
l'intégration des équations aux dérivées partielles. Acad.
Serbe. Bull. Acad. Sci. Mat. Nat. A. no. 6, 71-90 (.939).
The paper is an exposition of a method of Jacobi for
solving first order partial differential equations of the form
 $p_i = F(x_1, \dots, x_n; p_1, \dots, p_n), p_i = \partial z / \partial x_i$.

F. G. Dressel (Durham, N. C.).

Source: Mathematical Reviews.

Vol. 11 No. 3

SALTYKOW, N.
Saltykow, N. Méthodes immédiates d'intégration d'équa-
~~tions aux dérivées~~ partielles du second ordre. Acad.
Serbe. Bull. Acad. Sci. Mat. Nat. A., no. 6, 215-246
(1939).

The author discusses various partial differential equations
whose integrals are put in evidence by simple transforma-
tions. [Cf. Enseignement Math. 38, 132-159 (1940); these
Rev. 2, 55; the cited review contains a fuller account of the
author's results.] F. G. Dressel (Durham N. C.)

Source: Mathematical Reviews,

Vol 11 No. 3

SALTUKOV, N.

202

Saltykow, N. Transformations tangentielles linéaires.
~~Read. Serbe. Bull. Acad. Sci. Mat. Nat. A. 7, 71-87~~
 (1941)

Let $x_1, \dots, x_n$ and $x'_1, \dots, x'_n$ denote the old and new independent variables while z and z' denote the old and new dependent variables, respectively. A tangential transformation is called linear if it can be expressed in the form $x'_i = \sum_{j=1}^n a_{ij} p_j + c_i z + d_i$, $p_i = \partial z / \partial x_i$, $i = 1, \dots, n$, $z' = \sum_{i=1}^n b_i p_i + m z + r$, where a_{ij} , c_i , d_i , b_i , m , r are functions of $x_1, \dots, x_n$. The present paper presents methods of forming linear tangential transformations. *F. G. Dressel.*

Source: Mathematical Reviews,

Vol 10 No. 2

Emil

SAKTYKOW, N.

Santykw, N. Étude sur les intégrales singulières des équations différentielles. Acad. Serbe. Bull. Acad. Sci. Mat. Nat. A. 7, 89-134 (1941).

Let $f(x, y, y')$ have derivatives with respect to its arguments, and assume that the equation (*) $f(x, y, dy/dx) = 0$ has a general integral (***) $y = V(x, C)$. If (*) has a singular integral representing the envelope of the curves (**), the paper shows this singular integral is a solution of the Lagrange equations associated with (*). Conversely, it is also shown that a solution of the associated Lagrange equations is either a particular solution of (*) or an envelope of (**). The above results are extended to first order equations $f(x_1, \dots, x_n, z, p_1, \dots, p_n) = 0$, where $p_i = \partial z / \partial x_i$. [In the next to the last paragraph on page 94 replace y' by y . The only way the reviewer could justify the statement made in this paragraph was to replace $[\partial^2 V / \partial x \partial C] \equiv 0$ by $\partial^2 V / \partial x \partial C \equiv 0$.] F. G. Dressel (Durham, N. C.).

Source: Mathematical Reviews,

Vol 10 No. 2

SALTYKOW, N. Équations aux dérivées partielles du premier ordre intégrables par séparation des variables. Acad. Serbe. Bull. Acad. Sci. Mat. Nat. A. 7, 135-159 (1941).
Assuming that $H(x_1, \dots, x_n; p_1, \dots, p_n) = 0$, $p_i = \partial z / \partial x_i$, can be integrated by the method of separation of variables, the author presents some methods that may help one determine the possibility of this separation property.

F. G. Dressel (Durham, N. C.).

Source: Mathematical Reviews,

Vol 10 No. 2

ms
22

SALTYKOW, N.

230

Saltykow, N. Équations aux dérivées partielles d'ordre supérieur réductibles aux celles du premier ordre. Acad. Serbe. Bull. Acad. Sci. Mat. Nat. A. 7, 161-190 (1911).

Let x, y be the independent variables and z the dependent variable, and define $z_0 \equiv z$,

$$z_k = P(x, y) \partial z_{k-1} / \partial x + Q(x, y) \partial z_{k-1} / \partial y,$$

$k = 1, \dots, n$. The author points out that the general integral of a partial differential equation of order n of the form $z_n = f(x, y, z, z_1, \dots, z_{n-1})$ can be obtained by making use of the ordinary differential equations

$$\frac{dx}{P} = \frac{dy}{Q} = \frac{dz_{n-1}}{f} = \frac{dz_{n-1}}{z_{n-1}} = \dots = \frac{dz_0}{z_1}.$$

Most of the paper is devoted to applications to second, third and fourth order differential equations.

F. G. Dressel (Durham, N. C.).

Source: Mathematical Reviews,

Vol 10 No. 2

Small 1911

Saltikov, N.
 *Saltikov, N. Metode Integraljenja Parcijalnih Jednacija Prvog Reda s Jednom Nepoznatom Funkcijom. [Methods of Integration of Partial Equations of the First Order With a Single Unknown]. Serbian Academy of Sciences, Belgrade, 1947. xv + 749 pp. (Serbian)

A detailed treatment of the subject, mostly following the lines of historical development. The following is a list of chapter headings (in an abbreviated version). Definition and origin. Euler's contribution. Lagrange's investigations and later generalizations. Linear equations. Method of Lagrange and its generalization by Jacobi. Theory of characteristics. Second method of Jacobi. Systems. Intermediate integrals. Methods of Lie. Tangential transformations. Differential invariants. Canonical equations and their applications in dynamics. Use of separation of variables. Applications to celestial mechanics. W. Feller.

Source: Mathematical Reviews,

Vol 10 No. 4

SALTYKOW, N.

2

Saltykow, N. Application des invariants différentiels à l'intégration des équations aux dérivées partielles du premier ordre à une fonction inconnue. Acad. Serbe. Sci. Publ. Inst. Math. 1, 21-48 (1947).

Assume the linear partial differential forms

$$X(f) = \sum_{i=1}^n X_i(x_1, \dots, x_n) \frac{\partial f}{\partial x_i}; \quad Y^k(f) = \sum_{i=1}^n Y^k_i(x_1, \dots, x_n) \frac{\partial f}{\partial x_i}$$

where $k=1, \dots, s$, are such that

(*) $X(Y^k(f)) - Y^k(X(f)) = 0, \quad k=1, \dots, s$.
If $\varphi(x_1, \dots, x_n)$ is a solution of the system $Y^k(f) = 0$, then from (*) the functions $\varphi_1 = X(\varphi), \varphi_2 = X(\varphi_1), \dots, \varphi_{s+1} = X(\varphi_s)$ are seen to be solutions of $Y^k(f) = 0$. If $\varphi_1, \varphi_2, \dots, \varphi_s$ are independent functions and $\varphi_{s+1} = \theta(\varphi_1, \varphi_2, \dots, \varphi_s)$, the author points out that $\varphi_1, \varphi_2, \dots, \varphi_s$ may be used as follows to solve the system $X(f) = 0, Y^k(f) = 0$. Assume $f = \phi(\varphi_1, \varphi_2, \dots, \varphi_s)$; then the $Y^k(f) = 0$ are satisfied and $X(f) = 0$ takes the form

$$\frac{\partial \phi}{\partial \varphi_1} + \varphi_1 \frac{\partial \phi}{\partial \varphi_2} + \dots + \varphi_s \frac{\partial \phi}{\partial \varphi_{s+1}} + \theta \frac{\partial \phi}{\partial \varphi_s} = 0.$$

Any solution of this last equation leads to solutions of the system $Y^k(f) = 0$ enlarged by $X(f) = 0$. The paper also outlines a similar method for integrating systems of nonlinear partial differential equations of the first order.

F. G. Drezet (Durham, N. C.).

No.

SM

Math
*Saltikow, N. N. Problèmes actuels de la théorie moderne
d'équations aux dérivées partielles du premier ordre à
une fonction inconnue. Premier Congrès des Mathéma-
ticiens et Physiciens de la R.P.F.Y., 1949. Vol. II, Com-
munications et Exposés Scientifiques, pp. 23-31. Naučna
Knjiga, Belgrade, 1951. (Serbo-Croatian. French sum-
mary)

Source: Mathematical Reviews,

Vol 13 No. 5

SALTIKOW, N. N.: Present Problems of the Modern Theory of Equations
With Partial Derivatives of the First-Order With One
Unknown Quantity 16

sm

SALTYKOV, N.

Saltykow, N. Théorie générale des équations aux différentielles totales linéaires par rapport aux variables paramétriques. Acad. Serbe Sci. Publ. Inst. Math. 3, 143-167 (1950).

The first part of this paper contains some remarks about a completely integrable system of equations

$$(1) \quad dx_{m+r} = \sum_{i=1}^m \left(\sum_{j=1}^{n-m} A^i_{r,j} x_{m+j} \right) dx_i, \quad r=1, \dots, n-m,$$

with the $A^i_{r,j}$ functions of $x_1, \dots, x_m$. Also the non-homogeneous case is dealt with. The second part is devoted to the system (1) with the $A^i_{r,j}$ being constant. The general solution is written as a linear combination of $n-m$ solutions each of the form

$$x_{m+r} = \alpha_r e^{\theta_r x_1}, \quad r=1, \dots, n-m,$$

θ_r and α_r being constants. Three examples are given.

W. van der Kulk (Providence, R. I.).

conv
21

Mathematical Reviews,

Vol 12 No. 10

Saltikov, N. Lie's generalization of the theory of the last multiplier. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 1-16 (1950). (Serbo-Croatian)

To obtain the "last multiplier" for the system of total differential equations $dx_k = \sum_{i=1}^n X_i^k dt_i$ ($k=1, 2, \dots, m$) the author goes back to the original definition of the multiplier by Jacobi as the Jacobian of a complete system of integrals. If $f_1, f_2, \dots, f_m$ form a complete system of integrals of the corresponding normal system of partial differential equations then the Jacobian $\Delta = \partial(f_1, \dots, f_m)/\partial(x_1, \dots, x_m)$ is shown to satisfy the equations $\partial\Delta/\partial t_k + \sum_{i=1}^n \partial(X_i^k \Delta)/\partial x_i = 0$ ($k=1, 2, \dots, m$), and the quotient Δ/D , where

$$D = \partial(f_1, \dots, f_{m-1})/\partial(x_1, \dots, x_{m-1}) \neq 0,$$

is an integrating factor for the m th equation of the above system.

M. Golomb (Lafayette, Ind.).

SMW
Lat

Source: Mathematical Reviews.

Vol 12 No. 10

Seltikov, N. The differential invariants of functional groups of integrals. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 17-35 (1950). (Serbo-Croatian)

Let $f_1(x, p), f_2(x, p), \dots, f_\rho(x, p)$ ($\rho < n$) be a functional group of integrals without distinguished elements of the characteristic system S for the partial differential equation $F(x, p) = 0$, where $x = (x_1, x_2, \dots, x_n)$, $p = (p_1, p_2, \dots, p_n)$, $p_i = \partial z / \partial x_i$. The author's method of using these integrals for the calculation of a complete integral of $F = 0$ is essentially another variation of Korkin's method. One determines first a canonical group of differential invariants

$$\varphi_1(x, p), \dots, \varphi_{n-\rho}(x, p), \psi_1(x, p), \dots, \psi_{n-\rho}(x, p)$$

satisfying the relations $(f_i, \varphi_j) = (f_i, \psi_j) = (\varphi_i, \varphi_j) = (\psi_i, \psi_j) = 0$, $(\varphi_i, \psi_j) = \delta_{ij}$ ($k = 1, 2, \dots, 2\rho$; $i, j = 1, 2, \dots, n - \rho$). It follows that there exists a function $\Omega(x, p)$ that satisfies the equations $[\varphi_i, z - \Omega] = 0$, $[\psi_i, z - \Omega] = \psi_i$. The equations $x'_i = \psi_i$, $p'_i = \varphi_i$, $z' = z - \Omega$ define a reduced contact transformation by means of which the equation $F(x, p) = 0$ is reduced to one in the $n - \rho$ independent variables $\psi_1, \psi_2, \dots, \psi_{n-\rho}$. To carry out the inverse transformation one still needs to extract ρ integrals of S in involution from the given 2ρ integrals. The method is also applicable to systems of equations $F_\mu(x, p) = 0$ ($\mu = 1, 2, \dots, m$).

M. Golomb.

Source: Mathematical Reviews.

Vol 12 No. 15

Saltikov, N. Characteristic functions of partial equations of the second order. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 109, 37-52 (1950). (Serbo-Croatian) The two equations of second order

$F_{rr} + f(x, y, z, p, q, s) = 0$, $G = t + g(x, y, z, p, q, s) = 0$ are in involution in the sense of Darboux-Lie if the four derived equations $D_x F = D_y F = D_z F = D_p G = 0$ do not determine the four third order derivatives r_x, r_y, r_z, r_p . For such an involutory system (*) a system of six partial differential equations of first order of Charpit's type for the unknown functions s, p, q, r, z, t and a corresponding characteristic system of ordinary differential equations can be established. Let $y = Y(x, C_1, C_2, \dots, C_6)$, $z = Z(x, C_1, \dots, C_6)$, $t = T(x, C_1, \dots, C_6)$ be a general integral of the characteristic system. Assuming that $\partial Y / \partial C_3 \neq 0$ and that the equation $y = Y$ can be solved by $C_3 = \psi(x, r, C_1, \dots, C_6)$, the function $s = Z(x, C_1, \dots, C_6, \psi)$ is shown to be a complete integral of (*) if and only if $U_k \neq 0$ ($k = 1, 2, 3, 4$) and $U_5 = V_5 = 0$. Here U_k, V_k are the "characteristic functions" defined by

$$U_k = \partial Z / \partial C_k - Q(\partial Y / \partial C_k), \quad V_k = \partial Q / \partial C_k - T(\partial Y / \partial C_k).$$

The author also shows that the conditions for the general equation of second order $G(x, y, z, \dots, t) = 0$ to be in involution with the general equation of second order $F(x, y, z, \dots, t) = 0$ can be expressed as a pair of first order equations linear in the derivatives of the function G .

M. Golomb (Lafayette, Ind.).

Mattikov, N. A supplement to the problem of integration of the ~~linear~~ partial equations of the first order with a group of infinitesimal transformations. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 51-62 (1950). (Serbo-Croatian)

In this note it is shown that some (up to three) integrals can be determined by quadratures for linear partial differential equations in five, six, or seven independent variables with nonintegrable Lie groups of maximal order.

M. Golomb (Lafayette, Ind.).

Source: Mathematical Reviews.

Vol 12: No. 10

same. *Ed*

Saltikov, N. The general theory of total differential equations linear in the parametric variables. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 61-86 (1950). (Serbo-Croatian)
See the paper reviewed above.

Somw
1950

Source: Mathematical Reviews,

Vol 12 No. 10

Saltikov, N.

Saltikov, N. Problems of integration of total differential

equations. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 87-104 (1950). Series continuation.

In this paper the author takes up again the solution of the system of total differential equations $dx_{m+i} = a^i_{m+j} dx_j$ ($k=1, 2, \dots, m$; $i, j=1, 2, \dots, n-m$; summation convention is used) with constant coefficients a^i_{m+j} , that he considered before [C. R. Acad. Sci. Paris 225, 520-521 (1947); 228, 1913-1915 (1949); these Rev. 9, 186; 11, 111]. He presents three different methods of solution, characterized by the headings: variation of constants, reduction to ordinary differential equations, constant integration factors. From the sketchy presentation the reviewer could not decide whether these methods lead to the general solution in all cases. The paper also contains a theory of integration factors for the general system $dx_{m+i} = X^i_k dx_k$, where the X^i_k are functions of the variables $x_1, x_2, \dots, x_m, \dots, x_n$. The functions $\mu^1, \mu^2, \dots, \mu^{n-m}$ of these variables are integration factors for the system if the expressions $\mu^i(dx_{m+i} - X^i_k dx_k)$ are total differentials. They satisfy the system of partial differential equations of Charpit's type

$$\partial \mu^i / \partial x_k + X^i_k (\partial \mu^j / \partial x_{m+j}) = -\mu^j (\partial X^i_k / \partial x_{m+j}).$$

M. Golomb (Lafayette, Ind.).

Simon

Source: Mathematical Reviews,

Vol 12 No. 1()

SALEKOV

28

Salekov, N. Methods of integration of partial equations of the second order with one unknown function. Glas Srpske Akad. Nauka. Od. Prirod.-Mat. Nauka 198, 105-127 (1950). (Serbo-Croatian)

Besides a historical survey of methods for solving partial differential equations of second order this paper contains an elaboration on a method of solution discussed in earlier publications of the author [Acad. Roy. Belgique. Bull. Cl. Sci. (5) 18, 810-819 (1932); C. R. Acad. Sci. Paris 195, 525-527 (1932)]. To the given equation of the form $F = r + f(x, y, z, p, q, r, t) = 0$ another equation of the form $G = t + g(x, y, z, p, q, r, s) = 0$ is to be adjoined which is in involution with the first equation either in the sense of Darboux-Lie [see the preceding review] or in the sense of "complete integrability" which means that the functions r, s, t determined by the equations $D_r F = D_r G = D_s F = D_s G = 0$ satisfy the conditions $r_s = s_r, s_t = t_s$. The former condition restricts the class of equations F , the latter leads to a complicated second order equation for the function g of six independent variables, which can be solved only in very special cases. Once the function g is determined the integral s is found by solving a system of six partial differential equations of first order of Charpit's type. Depending on the generality of the function g a "complete" or "general" integral of $F = 0$ may be found.

M. Golomb.

SMW
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Mathematical Reviews,

Vol 12 No. 10

SALTYKOV, N.

Mathematical Reviews
Vol. 14 No. 7
July - August
Analysis

Saltykov, N. Théories analytiques et géométriques des équations aux dérivées partielles du premier ordre. Bull. Acad. Serbe Sci. (N.S.) 5, Cl. Sci. Math. Nat. Sci. Math. 1, 127-128 (1952).

Verfasser gibt einen historischen Bericht über die Entwicklung der Integrationstheorie der partiellen Differentialgleichungen erster Ordnung. Es handelt sich um Probleme, die bereits von G. Monge gestellt worden sind. Verfasser erwähnt aus der neuen Zeit insbesondere die Untersuchungen von H. Léauté [Dissertation, Paris, 1876], Hadamard [Cours d'analyse, t. II, Hermann, Paris, 1930] und Rachajsky [siehe nachstehendes Referat], mit welchen ein gewisser Abschluss der Untersuchungen erreicht wird.

M. Pini (Dacca).

SALTYKOW, N.

(2)

Mathematical Reviews
Vol. 14 No. 7
July - August, 1953
Analysis.

✓ Saltykow, N. Ordre d'un système d'équations différentielles ordinaires de la forme générale. Bull. Acad. Serbe Sci. (N.S.) 5, Cl. Sci. Math. Nat. Sci. Math. 1, 141-148 (1952).

This paper is identical in content with one reviewed earlier [Acad. Roy. Belgique. Bull. Cl. Sci. (5) 37, 213-226 (1951); these Rev. 13, 131].
M. Golomb.

SALTYKOV, N.

Mathematical Reviews
Vol. 14 No. 7
July-August 1953
Analysis

(4)
✓ Salykow, N. Domaine d'existence des intégrales d'un système d'équations aux dérivées partielles d'ordres supérieurs au premier. Bull. Acad. Serbe Sci. (N.S.) 5, C. Sci. Math. Nat. Sci. Math. 1, 149-156 (1952).
The author applies his modification of the majorant method [cf. Publ. Math. Univ. Belgrade 6-7, 189-196 (1938)] to the existence proof of analytic solutions for systems of partial differential equations. M. Golomb.

SA'TYKOW, N.

Mathematical Reviews
Vol. 14 No. 9
October 1963
History

①
Saltykow, N. La vie et l'oeuvre de Elie Cartan. Bull. Soc.
Math. Phys. Serbie 4, no. 3-4, 59-64 (1 plate) (1952).
(Serbo-Croatian. French summary)

SALTYKOW, N.

Saltykow, N. Théories analytiques et géométriques des ~~équations~~ aux dérivées partielles du premier ordre. Glas Srpske Akad. Nauka 206. Od. Prirod.-Mat. Nauka (N.S.) 5 (1953), 1-2. (Serbo-Croatian. French summary) Verfasser gibt eine Übersicht über bemerkenswerte Ab-

Partial
diff. eqnals

schnitte in der Theorie der Integrationstheorie partieller Differentialgleichungen erster Ordnung in einer unbekannten Funktion. Sie betrifft hinsichtlich analytischer Gesichtspunkte vornehmlich die Rolle der sogenannten charakteristischen Funktionen, hinsichtlich geometrischer Methoden im Sinne von G. Monge, neue von M. B. Rašajski gewonnene Resultate. Wie zu erwarten ist, gelingt die Berechnung vollständiger Integrale aus der Kenntnis der Charakteristiken. Die Integration totaler Differentialgleichungen ist neuerdings von J. S. Aržanyh behandelt worden [Uspehi Mat. Nauk (N.S.) 8 (1953), no. 3(55), 99-104; MR 15, 317], dessen Resultate, wie C. Orloff bemerkt hat, auch aus älteren Ergebnissen des Verfassers (N. Saltykow) erschlossen werden können. Es enthält sich dabei zunächst um die folgenden Arbeiten des Verfassers: R. Acad. Sci. Paris 128, 1899, 25-227; [Uspehi Mat. Nauk (N.S.) 8 (1953), no. 3(55), 99-104; MR 15, 317], dessen Resultate, wie C. Orloff bemerkt hat, auch aus älteren Ergebnissen des Verfassers (N. Saltykow) erschlossen werden können. Es enthält sich dabei zunächst um die folgenden Arbeiten des Verfassers: R. Acad. Sci. Paris 128, 1899, 25-227; [Uspehi Mat. Nauk (N.S.) 8 (1953), no. 3(55), 99-104; MR 15, 317], dessen Resultate, wie C. Orloff bemerkt hat, auch aus älteren Ergebnissen des Verfassers (N. Saltykow) erschlossen werden können. Es enthält sich dabei zunächst um die folgenden Arbeiten des Verfassers: R. Acad. Sci. Paris 128, 1899, 25-227; [Uspehi Mat. Nauk (N.S.) 8 (1953), no. 3(55), 99-104; MR 15, 317], dessen Resultate, wie C. Orloff bemerkt hat, auch aus älteren Ergebnissen des Verfassers (N. Saltykow) erschlossen werden können.

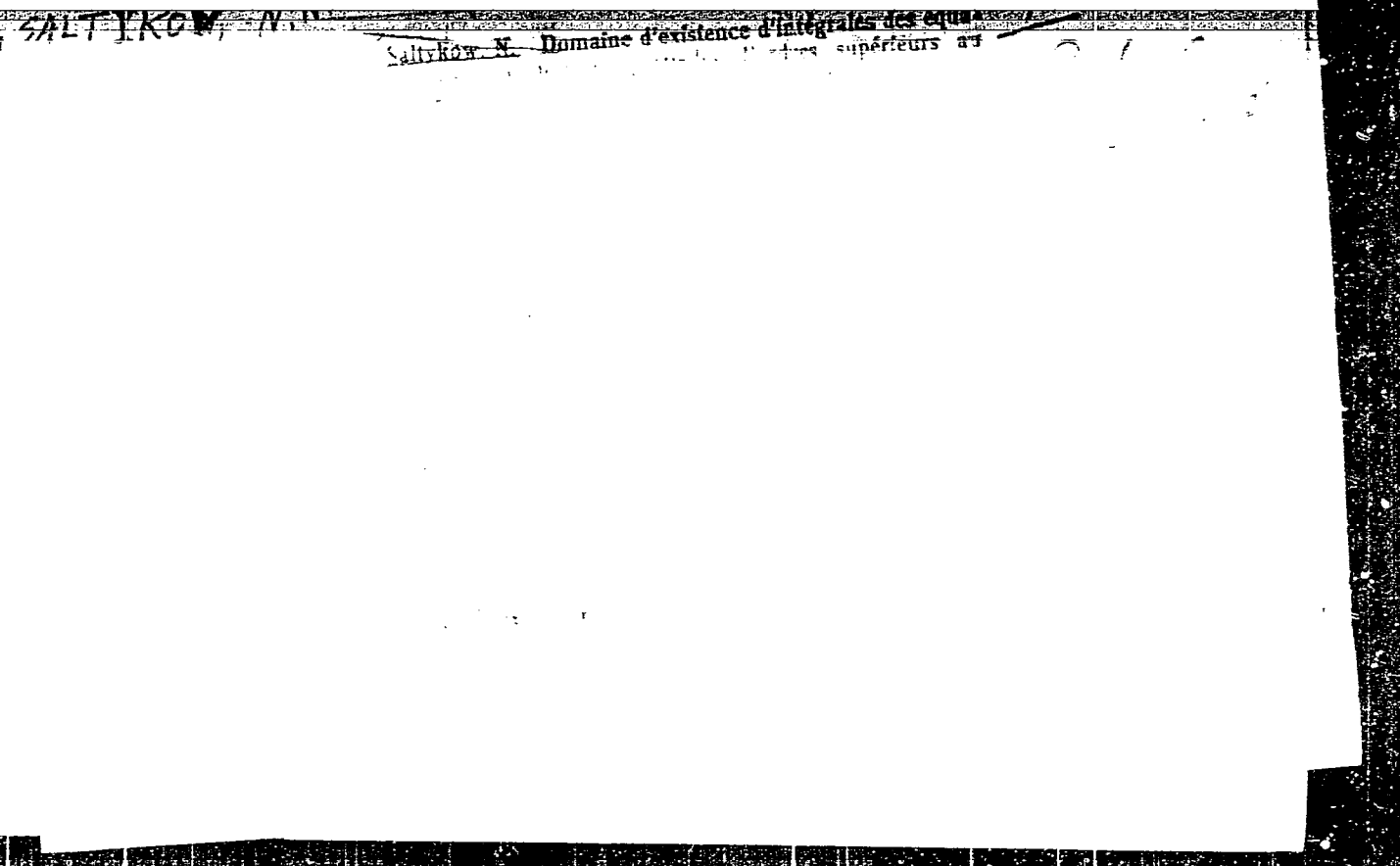
1937, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 26

Wm. L. G. Smith

SALTÍKOV, N.

"A Series of the System of Simple Differential Equations of the General Type." p. 17.
(Glas. Vol. 206, No. 5, 1953, Beograd.)

SO: Monthly List of East European Accessions. Vol. 3, No. 6, Library of Congress,
Feb. 1954, Uncl.



SAITIKOV, N.

"Integrals of S. Lie's Equations with Canonic Variables of the Second Degree." p. 71
(Glas. Vol. 206, no. 5, 1953. Beograd.)

SO: Monthly List of East European Accessions, Vol, 3, No. 6, Library of Congress,
Feb. 1954, Uncl.

SALTYKOV, N N

2

Saltykov, Nicola N. Equations aux derivees partielles du premier ordre integrables par separation des variables et generalisations sur l'equation de Schrödinger. Bull.

1

1. Abstract (Russian summary):

1.1. Generalized differential equations of the first order.

muß nach T. Levi Civita den Bedingungen

$$\frac{\partial F}{\partial x_k} F_k F_{n+k} = 0$$

$$k=1, \dots, n-1, \quad n=1, 2, \dots, k=1, \dots, n,$$

gilt, wenn sie nach der Methode der Separation in der Form $W = W_1 + W_2 + \dots + W_n$ dargestellt werden können, wobei $W_1, W_2, \dots, W_n$ Funktionen von $x_1, x_2, \dots, x_n$ sind, die die Bedingungen $\frac{\partial W_i}{\partial x_k} = 0$ für $k \neq i$ erfüllen.

SALTYKOW, NICOLA N.

$$\varphi_k = \frac{F_k}{F_{n-k}}, F_k = \frac{\partial F}{\partial x_k}, F_{n+k} = \frac{\partial F}{\partial p_k} \quad (k=1, 2, \dots, n).$$

Zusammen mit den die φ_k definierenden Gleichungen ergeben sich so $n(n+1)$ Gleichungen erster Ordnung für $n+1$ unbekannte Funktionen. Unter den Lösungen dieses Systems gibt es eine, welche die Koeffizienten der Ableitungen F_1, F_{n+1} zum Verschwinden bringen. Ist man von einer solchen singulären Lösung aus, setzt also die Koeffizienten gleich Null, so ergeben sich weitere Differentialgleichungen und aus diesen kommt man

$$x_1 = p_1, x_2 = p_2, x_3 = p_3, \dots, x_n = p_n.$$

$$p_1 = x_1, p_2 = x_2, p_3 = x_3, \dots, p_n = x_n.$$

$$x_{n+1} = p_{n+1}, x_{n+2} = p_{n+2}, \dots, x_{n+k} = p_{n+k}, \dots$$

Man kann also die Funktionen $x_1, x_2, \dots, x_n$ in der Form $x_k = p_k$ darstellen. Die Funktionen $p_1, p_2, \dots, p_n$ sind dann die Funktionen $x_1, x_2, \dots, x_n$.

SALTYKOW, NIGOLAI N.

und es gibt ebenso viele durch Separation der Variablen integrierbare Differentialgleichungen der Klasse $N-K$. Im Falle von n unabhängigen Veränderlichen ergeben sich also

$$\Sigma_n = 1 + N + \frac{N(N-1)}{1 \cdot 2} + \dots + \frac{N(N-1) \dots (N-K+1)}{K!} + \dots + N+1$$

$$(N = \frac{1}{2}n(n-1)).$$

verschiedene Typen solcher Gleichungen, z.B. für $n=2, 3, 4, 5$:

n	2	3	4	5
N	1	3	6	0
Σ_n	3	8	64	024

Eine ähnliche Abzählung war bereits von P. Burgatt gegeben worden (Atti Accad. Lincei Rend. Cl. Sci. Fis. Mat. Nat. 5 20 (1901) 108-111). Burgatt's Zahlen stimmen mit den von Verfasser gegebenen nicht überein, was in dem weit spezielleren Charakter seiner Voraussetzungen begründet ist. Nach einer eingehenden Diskussion des Falles $n=4$ behandelt Verfasser weiterhin den Fall Hamilton-Jacobischer partieller Differentialgleichungen für welche F durch

SHLT/KOV, NICOLA V

$$H = \sum_{k=1}^n A_{ik} \phi_k + U, \quad A_{ik} = A_{ki} = A_{ik}(x_1, \dots, x_n)$$

$$(U = U(x_1, \dots, x_n))$$

zu ersetzen ist. Hier ergeben sich zahlreiche Beziehungen
zwischen Elementen von N , E und M . St. v. d. V.

Sm
wje

SALTYKOW, N.
/Saltykow, N. Henri Poincaré (1854-1912). Srpska Akad.
Nauka. Zb. Rad. 43. Mat. Inst. 4, 1-13 (1955). (Serbo-MS 1-F/W
Croatian. French summary)

SALT Y KOW, NICOLAS N.

Partial Differential Equations of the First Order That Can Be Solved by the Method of Separation of Variables, and a Generalization of Schrödinger's Equation

Saltykow, Nicolas N. Equations aux dérivées partielles du premier ordre intégrables par séparation des variables et généralisation sur l'équation de Schrödinger. II. Bull. Soc. Math. Phys. Serbie 8 (1956), 89-110. (Russian summary)

Es handelt sich um die Fortsetzung einer früheren Arbeit des Verfassers, die das gleiche Thema behandelte [dasselbe Bull. 7 (1955), 137-152; MR 18, 44]. In einem einleitenden Abschnitt bibliographischer Natur werden Bedingungen für durch Separation der Variablen integrierbare partielle Differentialgleichungen erster Ordnung angegeben. Die partielle Differentialgleichung

$$H \equiv K - U = h, \quad K = A p_1^2 + 2B p_1 p_2 + C p_2^2,$$

$$A = A(x_1, x_2), \quad B = B(x_1, x_2), \quad C = C(x_1, x_2), \quad U = U(x_1, x_2), \\ h = \text{const},$$

wird zunächst in dem Fall studiert, daß die Integrabilitätsbedingungen auf das System

$$\frac{\partial \varphi_1}{\partial x_2} = \frac{\partial \varphi_2}{\partial x_1} = 0, \quad \varphi_r = \alpha_r p_1 + \beta_r p_2, \quad r = 1, 2,$$

$$\alpha_r = \alpha_r(x_1, x_2), \quad \beta_r = \beta_r(x_1, x_2)$$

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I-F/W

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1/2

Saltykow, Nicolas N.

führen. Damit gelangt man zu den sogenannten integrablen Gleichungen zweiter Klasse, für welche drei Unterfälle zu unterscheiden sind. Für die Gleichungen erster Klasse besteht

$$\frac{\partial \varphi_1}{\partial p_2} \neq 0, \quad \frac{\partial \varphi_1}{\partial x_2} - \varphi_2 \frac{\partial \varphi_1}{\partial p_2} = 0$$

In diesem Falle lassen sich von T. Levi-Civita gegebene Bedingungen zur Bestimmung der Funktion U heranziehen, die wiederum auf drei Fallunterscheidungen führen [Math. Ann. 59 (1904), 383-397]. Für die Gleichungen zweiter Klasse ergeben sich Verallgemeinerungen der von P. Stäckel erhaltenen Resultate, für die Gleichungen der ersten Klasse Verallgemeinerungen der Resultate von P. Stäckel und J. Liouville. — Im letzten Abschnitt wird die Theorie auf den Fall von drei unabhängigen Veränderlichen ausgedehnt. Dann handelt es sich um die Differentialgleichung

$$H = K - U = h, \quad K = A p_1^2 + C p_2^2 + F p_3^2,$$

worin die Koeffizienten A, C, F nunmehr Funktionen von x_1, x_2, x_3 sind. Auch für diesen Fall lassen sich Ergebnisse von T. Levi-Civita zum weiteren Ausbau der Theorie benutzen.

M. Pinl (Köln).

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2/2

2
1-FW

Saltykow, N. Fonctions caractéristiques des équations
aux dérivées partielles du second ordre. Bull. Acad.
Serbe Sci. Cl. Sci. Math. Nat. (N.S.) 10 (1956), no. 2,
1-18.

2
"An application of Charpit's equation to the formation
of ordinary differential equations corresponding to two
partial differential equations of second order in two
independent variables is considered. The notion of
characteristic functions of the system in question is
introduced. Their application to the formation of a
complete integral of a system of two equations satisfying
à Darboux-S. Lie involution is considered. A transfor-
mation of these latter conditions of involution is considered
in order to obtain a second order partial differential
equation in involution with a given one." (Author's
summary.) M. Steinberg (Los Angeles, Calif.)

Integration of Linear Equations

^{N.}
Salvykow, N. Problèmes d'intégration d'équations li-
néaires. Bull. Acad. Serbe Sci. Cl. Sci. Math. Nat. (N.S.),
10 (1956), no. 2, 49-87.

Betrachten wir die Differentialgleichung (1) $y'' + ay' + by = f(x)$ mit konstanten Koeffizienten. Schreiben wir sie in der Form $(y' - ky)' + (a+k)(y' + by/(a+k)) = f(x)$ und wählen die Konstante k so, dass $b/(a+k) = -k$, also $k^2 + ak + b = 0$ gilt. Dann bekommt man die allgemeine Lösung von (1), wenn man zwei lineare Differentialgleichungen erster Ordnung löst, nämlich $x' + (a+k)x = f(x)$ und $y' - ky = x$. Diese Idee wird von dem Verfasser verallgemeinert und zur Lösung der linearen Differentialgleichungen beliebiger Ordnung sowie auch der Systeme linearer Differentialgleichungen angewendet. Zum Ende wird ein neuer Beweis eines Liapounoffschen Stabilitätskriteriums geliefert.

M. Zldmal (Brno)

2
1-F/W

Theory of Characteristic Equations of the First Order Partial Derivative

Saltikov, N. Note sur la théorie des caractéristiques
d'équations aux dérivées partielles du premier ordre.
Glas Srpske Akad. Nauka. 232 Od. Prirod.-Mat. Nauka
(N.S.) 15 (1958), 9-19. (Serbo-Croatian. French summary)

L'auteur analyse l'algorithme Jacobien pour former les
équations des caractéristiques d'équations aux dérivées
partielles du premier ordre à une fonction inconnue. Il y
introduit deux nouvelles notions, de corrélation et d'in-
compatibilité d'équations aux dérivées partielles avec
leurs intégrales complètes.

B. S. Popov (Skopje)

2
1-F/W

SALTYKOV, O.G.; SVARICHEVSKAYA, Z.A.

History of the valley of the middle and lower Selety River
(North Kazakhstan). Izv. AN Kazakh. SSR. Ser. geol. (MIRA 14:6)
no.1:51-60 '61. (Selety Valley--Geology)

KARDOPOL'TSEVA, O.I.; MOREVA, V.A.; PLOTNIKOVA, M.I.; SALTYKOV, O.G.;
UMANETS, V.N.

New data on "water-shed pebbles" in the Markha-Tyung interfluve.
Trudy VSEGEI 66:117-133 '61. (MIRA 15:4)
(Markha Valley--Alluvium) (Tyung Valley--Alluvium)

PLOTNIKOVA, M.I.; KARDOPOL'TSEVA, O.I.; SALTYKOV, O.G.; UMANETS, V.N.;
GLUSHKOVSKIY, I.B.

Stratigraphy and lithology of "interstream pebble beds" in the
Markha-Tyung interfluvial and paleogeography of the time of their
accumulation in connection with the formation of diamond-
bearing placer deposits in the middle Markha Basin. Trudy
IAFAN AN SSSR Ser. geol. no.9:123-141 '63. (MIRA 16:12)

PILOTNIKOVA, M.I.; KARLOPOL'TSEVA, O.I.; SALTYKOV, O.G.; UMANETS, V.N.

Paleogeography of the Markha and Tyung interfluvium in the Cenozoic
as related to the history of the formation of diamond placers
(Eastern Siberia). Trudy VSEGEI 90:81-96 '63. (MIRA 17:5)

SALTYKOV, P.I.; SPODYRYAK, N.T.

Some data pertaining to heat transfer in an annular
channel with an external radiator. Izv.AN Kazakh.SSR
Ser.energ. no.2:104-111 '60. (MIRA 13:7)
(Boilers) (Heat--Transmission)

SPODYRYAK, N.T.; CHERNOV, A.P.; FAVORSKIY, V.V.; SALTYKOV, P.I.

Experience in burning Ekibastuz coals in fuel bed furnaces.
Trudy Inst.energ.AN Kazakh.SSR 3:178-189 '61. (MIRA 14:12)
(Ekibastuz Basin--Coal)

SALTYKOV, P.I.; SPODYRYAK, N.T.

Heat exchange in ring ducts with external radiation. Izv. AN Kazakh.
SSR. Ser.tekh. i khim.nauk no.3:77-86 '64. (MIRA 17:2)

SALTYKOV, R. A.

"Concerning the Stability of the Biological Characteristics of the Variants
of B. anthracis STI and GIEV-III Noncapsulated," pages 102-113 of the book
Anthrax STI, Moscow, 1946

Vaccine

SALTYKOV, R. A., KOPYLOV, N. F., GINSBURG, N. N. and TAMARIN, A. L.

"The Question of Stability of the Basic Biological Features of Anthrax Vaccine Strain STI-I," pages 142-152 of the book Anthrax Vaccine STI, Moscow, 1946

SALTYKOV, R.A.; REZEPOV, F.F.; ZEMSKOV, Ye.M. (Moskva)

On the rate of the development of immunity following revaccination
with anaerobi anatoxins. Biul.eksp.biol.i med. 47 no.8:81-84 Ag '59.
(MIRA 12:11)

1. Predstavlena deystvitel'nyy chlenom AMN SSSR P.F. Zdrodovskiy.
(GLOSTRIDIUM immunol.)
(VACCINES)